

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 6,784,023 B2  
APPLICATION NO. : 09/943880  
DATED : August 31, 2004  
INVENTOR(S) : Michael B. Ball

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**On the title page:**

ITEM (56) "References Cited"

after the last entry appearing in the "FOREIGN  
PATENT DOCUMENTS" section, insert:

-- OTHER PUBLICATIONS  
IBM Technical Disclosure Bulletin, P.F.  
Iafrate, High Density and Speed  
Performance Chip Joining Procedure and  
Package, Vol. 15, No. 4, Pg. 1281.--

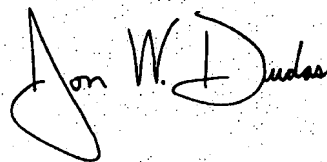
**In the specification:**

COLUMN 1, LINE 7,

change "pending," to --now U.S. Patent  
6,337,227 issued Jan. 8, 2002,--

Signed and Sealed this

First Day of May, 2007

A handwritten signature in black ink, appearing to read "Jon W. Dudas", is written over a faint, dotted rectangular stamp.

JON W. DUDAS  
*Director of the United States Patent and Trademark Office*